

## *ABSTRACT*

Data packets are transmitted between two STAs capable of using plural radio channels and MIMO together, by using idle channels and MIMO. When at least one idle  
5 channel has been detected, plural data packets are generated in the same number as the sum of MIMO numbers of the respective idle channels, in which the data packets are generated from one or plural data frames, and plural data packets having the same packet time length are transmitted simultaneously between the two STAs by using the idle channels and MIMO.